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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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WOODCOCK WASHBURN LLP ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103			PHAN, TAM T	
			ART UNIT	PAPER NUMBER
			2144	

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/838,436

Applicant(s)

CSERI ET AL.

Examiner

Tam (Jenny) Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 and 30-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 and 30-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Amendment received on 12/15/2004 has been entered. Claims 1, 12, 16, 20, 23, 27, and 38 are currently amended. Claim 29 is cancelled.
2. Claims 1-28 and 30-38 are presented for examination.

#### *Priority*

3. No priority claims have been made.
4. The effective filing date for the subject matter defined in the pending claims in this application is 04/19/2001.

#### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-28 and 30-38 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for "tokenizing tag names into numeric tokens", does not reasonably provide enablement for "binary format allows for incremental output and parsing of the data stream without forcing the creation of tables at the beginning of the stream". The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The relevant passages in the specification of the instant application relating to the issue is disclosed below:

"Streaming access is also important both at parsing and generation time, and so the format is designed to allow incremental output and parsing of the XML document without forcing the creation of a global token table or string table at the beginning of the stream. These and other aspects are described in more detail below";

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"Streaming access is also important both at parsing and generation time, and so the binary format, generated or parsed by modules 210a, 210b, 310a or 310b, is designed to allow incremental output and parsing of the XML document without forcing the creation of a global token table or string table at the beginning of the stream"; and

"The present invention may be distinguished from WAP. With respect to WAP, first, the XML document encoding is not as complete as its W3C counterpart i.e., DTD, comments and named entity references are lost. Second, a string table is included at the beginning at the stream, which doesn't allow incremental addition to the table. Third, there is no primitive data type encoding although it is possible to provide application specific binary data with the extension tags. Fourth, the element/attribute token space is limited i.e., WAP allows 60 tokens per code page. This quickly makes it necessary to switch code pages around and so a 3 bytes per tag start may be utilized. Lastly, WAP does not allow XML text to mix in".

7. There is no description in the instant specification that teach how the binary format of the claimed invention is able to allow for incremental output and parsing of the data stream without forcing the creation of tables at the beginning of the stream.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-28 and 30-38 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: how the binary format allows for incremental output and parsing of the data stream without forcing the creation of tables at the beginning of the stream.

10. Claim 1-28 and 30-38 provides for the use of a "binary format allows for incremental output and parsing of the data stream without forcing the creation of tables at the beginning of the stream", but, since the claim does not set forth any steps

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involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 1-28 and 30-38 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

### ***Claim Rejections - 35 USC § 102***

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

12. Claims 1-28 and 30-38 are rejected under 35 U.S.C. 102(a) as being anticipated by Girardot et al. (Millau: an Encoding format for efficient representation and exchange of XML over the Web" Computer Networks 2000), hereinafter referred to as Girardot.

13. Regarding claims 1-2, Girardot disclosed a method for generating a data stream according to a binary format of a tag-based description language comprising tokenizing tag names and tokenizing attribute names into numeric tokens for use in the data stream (page 749 column 1, 3. The Millau compression model paragraphs 1-2; page 751 Table 2, column 1, 4.0 Millau API: specification and implementation paragraph 1), wherein the data in the data stream is transmitted incrementally to the receiving device

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and the receiving device parsed said data as said data is received (pages 752-753 4.2.

The Millau binary SAX parser, pages 753-753 4.3. The Millau binary DOM parser).

14. Regarding claim 3-4, Girardot disclosed a method wherein said numeric tokens for tag names and attribute names are variable sized (page 750 Table 1).

15. Regarding claim 5, Girardot disclosed a method wherein said tokenizing of attributes enables values natively stored as binary data types to be inserted into the data stream (page 750 column 1 paragraph 2).

16. Regarding claim 6, Girardot disclosed a method wherein said tokenizing of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream (page 751 4. Millau API: specification and implementation).

17. Regarding claim 7, Girardot disclosed a method wherein the tag-based description language is extensible markup language (XML) (Title, page 750 column 1 paragraph 2).

18. Regarding claim 8, Girardot disclosed a method wherein the tokenizing of the tag and attribute names decreases the time elapsed parsing the data stream by a device that receives the data stream, the time being decreased relative to the parsing of a corresponding text-based format of the tag-based description language (page 752 4.2 The Millau binary SAX parser).

19. Regarding claim 9, Girardot disclosed a method wherein the tokenizing of the tag and attribute names decreases overhead incident to formatting data for representation according to the tag-based description language (page 751 column 1, 4.0 Millau API: specification and implementation paragraphs 1-2).

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20. Regarding claim 10, Girardot disclosed a method wherein the tokenizing of the tag and attribute names decreases the size of the resulting data file formatted according to the tag-based description language (page 748 column 1 paragraph 2, column 2 paragraph 4; page 751 column 1).

21. Regarding claim 11, the A computer readable medium bearing computer executable instructions corresponds directly to the method of claim 1, and thus is rejected using the same rationale.

22. Regarding claim 12, Girardot disclosed a computer readable medium bearing computer executable instructions for carrying out the method of receiving a well-formed document in a text format of a tag-based description language and converting the document to a binary format via tokenization of the tag and attribute names into numeric tokens (page 751 column 1), wherein the data in the data stream is transmitted incrementally to the receiving device and the receiving device parsed said data as said data is received (pages 752-753 4.2. The Millau binary SAX parser, pages 753-753 4.3. The Millau binary DOM parser).

23. Regarding claim 13, Girardot disclosed a computer readable medium wherein said tokenization of attributes enables values natively stored as binary data types to be inserted into the data stream (page 750 column 1 paragraph 2).

24. Regarding claim 14, Girardot disclosed a computer readable medium wherein said tokenization of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream (page 751 4. Millau API: specification and implementation).

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25. Regarding claim 15, Girardot disclosed a computer readable medium said receiving includes receiving a document formatted according to a text format of XML (Title, page 750 column 1 paragraph 2, page 751 column 1).

26. 16. A computer readable medium bearing computer executable instructions for carrying out the method of assembling data into a document according to a binary format by tokenizing the tag and attribute names into variable sized numeric tokens (page 749 column 1, 3. The Millau compression model paragraphs 1-2; page 751 Table 2 and column 1), wherein the data in the data stream is transmitted incrementally to the receiving device and the receiving device parsed said data as said data is received (pages 752-753 4.2. The Millau binary SAX parser, pages 753-753 4.3. The Millau binary DOM parser).

27. Regarding claim 17, Girardot disclosed a computer readable medium wherein said tokenizing of attributes enables values natively stored as binary data types to be inserted into the data stream (page 750 column 1 paragraph 2).

28. Regarding claim 18, Girardot disclosed a computer readable medium wherein said tokenizing of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream (page 751 4. Millau API: specification and implementation).

29. Regarding claim 19, Girardot disclosed a computer readable medium said receiving includes receiving a document formatted according to a text format of XML (Title, page 750 column 1 paragraph 2, page 751 column 1).



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30. Regarding claim 20, Girardot disclosed a computer readable medium bearing computer executable instructions for carrying out the method of receiving a document formatted according to a binary format of a tag-based description language and directly parsing the data in the document for use by another element in a computer system (pages 752-753 4.2 The Millau binary SAX parser), wherein the data in the data stream is transmitted incrementally to the receiving device and the receiving device parsed said data as said data is received (pages 752-753 4.2. The Millau binary SAX parser, pages 753-753 4.3. The Millau binary DOM parser).

31. Regarding claim 21, Girardot disclosed a computer readable medium wherein before said parsing, said method includes converting the document to a text format of the tag-based description language (pages 752-753 4.2 The Millau binary SAX parser).

32. Regarding claim 22, Girardot disclosed a computer readable medium wherein said receiving includes receiving a document formatted according to a binary format of XML (Title, page 750 column 1 paragraph 2, page 751 column 1).

33. Regarding claim 23, Girardot disclosed a computing device comprising means for receiving a well-formed document in a text format of a tag-based description language; means for converting the document to a binary format via tokenization of the tag and attribute names into variable sized numeric tokens; and means for converting the document back to the text format without a loss of fidelity (page 749 column 1 3. The Millau compression model paragraphs 1-2; page 750 paragraph 2; page 751 column 1; pages 752-753 4.2 The Millau binary SAX parser), wherein the data in the data stream is transmitted incrementally to the receiving device and the receiving device

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parsed said data as said data is received (pages 752-753 4.2. The Millau binary SAX parser, pages 753-753 4.3. The Millau binary DOM parser).

34. Regarding claim 24, Girardot disclosed a computing device wherein said tokenization of attributes enables values natively stored as binary data types to be inserted into the data stream (page 750 column 1 paragraph 2).

35. Regarding claim 25, Girardot disclosed a computing device wherein said tokenization of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream (page 751 4. Millau API: specification and implementation).

36. Regarding claim 26, Girardot disclosed a computing device said tag-based description language is XML (Title, page 750 column 1 paragraph 2).

37. Regarding claim 27, Girardot disclosed in a system in which a transmitting device transmits in a streaming fashion data formatted according to a tag-based description language, a method for generating a data stream according to a binary format of the tag-based description language, comprising: for each unique tag name, at the first time a tag name of the data is encountered, tokenizing the tag name into a numeric token and transmitting the token and the text associated with the tag name; and at any time subsequent to the first time that the tag name of the data is encountered, transmitting the numeric token without the text (page 748 column 2 paragraph 1; page 749 column 1 3. The Millau compression model paragraphs 1-2; page 750 paragraph 2; page 751 column 1; pages 752-753 4.2 The Millau binary SAX parser), wherein the data in the data stream is transmitted incrementally to the receiving device and the receiving device

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parsed said data as said data is received (pages 752-753 4.2. The Millau binary SAX parser, pages 753-753 4.3. The Millau binary DOM parser).

38. Regarding claim 28, Girardot disclosed a method further comprising tokenizing attribute names into numeric tokens (page 749 column 1, 3. The Millau compression model paragraphs 1-2; page 751 Table 2).

39. Regarding claim 30-31, Girardot disclosed a method wherein said numeric tokens for tag names and attribute names are variable sized (page 750 Table 1).

40. Regarding claim 32, Girardot disclosed a method wherein said tokenizing of attributes enables values natively stored as binary data types to be inserted into the data stream (page 750 column 1 paragraph 2).

41. Regarding claim 33, Girardot disclosed a method wherein the tag-based description language is extensible markup language (XML) (Title, page 750 column 1 paragraph 2).

42. Regarding claim 34, Girardot disclosed a method wherein the tokenizing of the tag and attribute names decreases the time elapsed parsing the data stream by a device that receives the data stream, the time being decreased relative to the parsing of a corresponding text-based format of the tag-based description language (page 752 4.2 The Millau binary SAX parser).

43. Regarding claim 35, Girardot disclosed a method wherein the tokenizing of the tag and attribute names decreases overhead incident to formatting data for representation according to the tag-based description language (page 748 column 1 paragraph 2, column 2 paragraph 4; page 751 column 1).

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44. Regarding claim 36, Girardot disclosed a method wherein the tokenizing of the tag and attribute names decreases the size of the resulting data file formatted according to the tag-based description language (page 748 column 1 paragraph 2, column 2 paragraph 4; page 751 column 1).

45. Regarding claim 37, the A computer readable medium bearing computer executable instructions corresponds directly to the method of claim 27, and thus is rejected using the same rationale.

46. Regarding claim 38, Girardot disclosed a method for generating a data stream according to an XML binary format, comprising: tokenizing tag names and attribute names into variable sized numeric tokens, wherein said tokenizing of attributes enables values natively stored as binary data types to be inserted into the data stream, wherein said tokenizing of tag names includes inserting a name definition construct into the data stream the first time a tag name is encountered for purposes of recreating the tag names by a device that receives the data stream, thereby decreasing parsing time (page 748 column 2 paragraph 1; page 749 column 1 3. The Millau compression model paragraphs 1-2; page 750 paragraph 2; page 751; pages 752-753 4.2 The Millau binary SAX parser; pages 754-755 4.6 The Millau code spaces), wherein the data in the data stream is transmitted incrementally to the receiving device and the receiving device parsed said data as said data is received (pages 752-753 4.2. The Millau binary SAX parser, pages 753-753 4.3. The Millau binary DOM parser).

47. Since all the limitations of the claimed invention were disclosed by Girardot, claims 1-28 and 30-38 are rejected.

***Response to Arguments***

48. Applicant's arguments filed 12/15/2004 have been fully considered but they are not persuasive.

49. Applicant's arguments "Girardot et al. is silent as to such incremental output and parsing of the data stream" fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. However, for argument purposes, the argument relating to the parsing of the data stream will be addressed as followed. Applicant argued that Girardot is silent in the teaching of parsing of the data stream. The Examiner respectfully disagrees.

Girardot disclosed a binary SAX parser and a binary DOM parser. In addition, Girardot also disclosed "It is expected that parsing a compressed Millau stream using our SAX parser is faster than decompressing a compressed XML stream and then parsing it with a conventional SAX parser". It should be obvious that the parsing of the data stream is clearly disclosed in Girardot.

50. Applicant's arguments "No mention is made of a 'binary format [that] allows for incremental output and parsing of the data stream without forcing the creation of tables at the beginning of the stream" do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections. Simply arguing that Girardot did not teach the limitation is not sufficient and would not help the Examiner in further understanding the claimed invention.

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51. In response applicant's argument regarding to the amended limitation "without forcing the creation of tables at the beginning of the stream", it is submitted that this is a negative limitation which the applicant did not invent. One cannot claim limitations which one did not himself/herself invent the subject matter sought to be patented.

52. As the rejection reads, the Office asserts that the combination of these teachings render the claimed invention obvious.

### ***Conclusion***

53. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

54. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (571) 272-3930. The examiner can normally be reached on M-F 9:00-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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